

REPORT

ON THE

AGRICULTURAL INSTRUCTION ACT

1920-1921

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

F. A. ACLAND

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1921

REPORT

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REPORT
ON THE
AGRICULTURAL INSTRUCTION ACT
FOR THE FISCAL YEAR 1920-21

Tabled in pursuance of Section 8 of the above-named Act

ALLOCATION

The allocation of the grant made to the provinces of Canada for the fiscal year ending March 31, 1921, under the Agricultural Instruction Act was as follows:—

PRINCE EDWARD ISLAND

1. Agricultural buildings—equipment and maintenance.. ..	\$ 1,507 00
2. Director and agricultural representatives.. ..	3,235 00
3. Short courses.. ..	246 00
4. Drainage, soils and crops.. ..	7,968 00
5. Live stock and dairying.. ..	2,056 00
6. Poultry, horticulture, bee-keeping and co-operative marketing	855 00
7. Women's institutes.. ..	2,566 00
8. Agricultural instruction in public and high schools, training of teachers, allowances, grants, maintenance of Rural Science Department, Prince of Wales College.. ..	12,806 00
9. Contingencies and miscellaneous.. ..	510 22
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	\$31,749 22

NOVA SCOTIA

COLLEGE OF AGRICULTURE

1. Science building—Interest and Sinking Fund.. ..	\$ 8,000 00
2. Salaries and maintenance.. ..	23,000 00

INSTRUCTION AND DEMONSTRATION

3. Agricultural representatives.. ..	12,000 00
4. Short courses.. ..	1,000 00
5. Dairying.. ..	5,500 00
6. Poultry.. ..	1,500 00
7. Bee-keeping.. ..	500 00
8. Drainage and soil survey.. ..	1,800 00
9. Soils and fertilizers.. ..	1,500 00
10. Field crops.. ..	1,200 00
11. Fruit growing.. ..	1,000 00
12. Women's work.. ..	4,000 00
13. Entomological work.. ..	7,500 00

ELEMENTARY AGRICULTURAL EDUCATION

14. Agricultural instruction in public, high and normal schools, teacher training, grants and allowances.. ..	12,000 00
15. Contingencies.. ..	1,216 69
	<hr/>
	\$81,716 69

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NEW BRUNSWICK

1. Agricultural schools—Salaries and maintenance.. . . .	\$ 400 00
2. Agricultural representatives.. . . .	11,000 00
3. Bee-keeping.. . . .	2,700 00
4. Soils and drainage.. . . .	5,000 00
5. Horticulture.. . . .	5,000 00
6. Short courses.. . . .	800 00
7. Live stock.. . . .	3,000 00
8. Dairying.. . . .	5,400 00
9. Poultry.. . . .	4,500 00
10. Entomology.. . . .	110 00
11. Agricultural societies.. . . .	3,000 00
12. Women's institutes.. . . .	9,300 00
13. Elementary agricultural education: Agricultural instruction in public, high and normal schools, household science, teacher training, grants and allowances.. . . .	13,900 80
	<hr/>
	\$64,110 80

QUEBEC

COLLEGES AND SCHOOLS OF AGRICULTURE

1. Grants and allowances—Macdonald College, School of Agriculture, Ste-Anne de la Pocatière, Oka Agricultural Institute.. . . .	\$75,000 00
2. School of Veterinary Science, building and extension.. . . .	5,000 00

INSTRUCTION AND DEMONSTRATION

3. Animal husbandry.. . . .	9,000 00
4. Poultry husbandry.. . . .	18,000 00
5. Horticultural and entomological work.. . . .	31,000 00
6. Experimental and demonstration orchards.. . . .	4,000 00
7. Dairying, educational work in cheese and butter-making.. . . .	5,000 00
8. Agricultural representatives.. . . .	69,000 00
9. Seed selection, clover plots and demonstrations.. . . .	9,000 00
10. Bee-keeping—educational work.. . . .	7,000 00
11. Drainage.. . . .	6,000 00
12. Maple industry—maintenance of schools and allowance to students.. . . .	4,000 00
13. Short courses and lectures.. . . .	9,113 76

ELEMENTARY AGRICULTURAL EDUCATION

14. To promote the teaching of agriculture in academies, rural and normal schools, teacher training, school gardens...	8,000 00
15. To promote the teaching of domestic science in academies and normal schools—Grants, lectures and inspection....	10,000 00
16. School children's exhibits.. . . .	2,000 00
	<hr/>
	\$271,113 76

ONTARIO

AGRICULTURAL COLLEGES AND SCHOOLS

1. Ontario Agricultural College—	
(a) Buildings, equipment and furnishings.. . . .	\$14,000 00
(b) Salaries and expenses, additions to staff, maintenance.. . . .	15,000 00
	<hr/>
	\$29,000 00
2. Agricultural School and Farm—	
(a) Capital expenditure.. . . .	50,000 00
(b) Administrative and teaching staff, maintenance, purchase of stock, machinery, repairs, services, expenses and equipment.. . . .	20,000 00
	<hr/>
	70,000 00

SESSIONAL PAPER No. 15a

INSTRUCTION AND DEMONSTRATION

3. Agricultural representatives, including clerical and other assistance in connection with the administration.. ..	\$135,000 00
4. Extension work in household science in rural communities ..	1,500 00
5. Co-operation and markets, investigation of marketing conditions for Ontario crops, educational work in connection with the marketing of farm products, including organization of co-operative societies.. ..	11,000 00
6. Demonstration and instruction in vegetable growing.. ..	12,000 00
7. O.A.C. short courses for winners of Acre Profit and Live Stock Competitions, including travelling and living expenses..	2,500 00
8. Women's Institute work, including courses in cooking, sewing, etc.	5,000 00
9. Short courses for poultry judges, including travelling and living expenses.. ..	1,000 00
10. Lectures on horticulture.. ..	500 00
11. Demonstrations in growing and handling fruit.. ..	1,803 26
12. Demonstrations with vegetables and hardy fruits in New Ontario.. ..	5,000 00
13. Vineland Horticultural Experiment Station, experimental work	3,000 00
14. Demonstration work on soils.. ..	6,000 00
15. Bee-keeping.. ..	1,000 00
16. Instruction and special educational work in growing and handling corn.. ..	3,500 00
17. Drainage work.. ..	4,500 00

ELEMENTARY AGRICULTURAL EDUCATION

To provide for and to encourage the teaching of agriculture, manual training as applied to work on the farm, and domestic science in high, public, separate and continuation schools, and in universities, to be available for grants, services, expenses and equipment, and travelling and living expenses of teachers, inspectors and others in attendance at short courses or other educational gatherings, and to be paid out on the recommendation of the Department of Education.. ..	44,000 00
	<u>\$336,303 26</u>

MANITOBA

Agricultural representatives.. ..	\$13,000 00
Dairy work.. ..	6,000 00
Poultry work.. ..	4,000 00
Boys' and Girls' Clubs.. ..	15,000 00
Short courses.. ..	18,000 00
Home economics.. ..	13,000 00
Soil analysis and survey.. ..	1,000 00
Bee-keeping.. ..	2,000 00
Killarney Demonstration Farm.. ..	4,000 00
Contingencies and miscellaneous.. ..	1,113 11
	<u>\$77,113 11</u>

SASKATCHEWAN

COLLEGE OF AGRICULTURE

1. Staff salaries—Research and Extension Service.. ..	\$19,209 49
2. Women's work.. ..	7,500 00

INSTRUCTION AND DEMONSTRATION

3. Co-operation and marketing.. ..	1,000 00
4. Animal husbandry.. ..	3,000 00
5. Dairying.. ..	3,000 00
6. Field husbandry.. ..	5,000 00
7. Demonstration trains.. ..	7,000 00
8. Agricultural representatives.. ..	7,209 50
9. Veterinary short course.. ..	500 00

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ELEMENTARY AGRICULTURAL EDUCATION

10. Agricultural instruction in public, high and normal schools, household science, training of teachers, nature study..	19,209 49
11. School fairs..	7,500 00

MISCELLANEOUS

12. Post graduate course in agriculture; agricultural scholarships.	1,600 00
	<hr/> \$81,728 48

ALBERTA

Schools of agriculture..	\$40,000 00
Women's work..	9,500 00
Agricultural representatives..	14,900 00
Poultry and Egg Marketing Service..	2,500 00
Miscellaneous..	65 62
	<hr/> \$66,965 62

BRITISH COLUMBIA

1. Dry Farming Demonstration Stations and field crops.. . . .	\$ 1,500 00
2. Seed work..	500 00
3. Silo demonstrations..	1,500 00
4. Horticultural demonstrations and competitions.. . . .	1,000 00
5. Fruit packing and pruning schools..	800 00
6. Poultry..	500 00
7. Dairy and cow-testing..	2,500 00
8. Bee-keeping..	8,000 00
9. Boys' and Girls' Clubs..	800 00
10. Agricultural Journal and Publications Branch.. . . .	8,000 00
11. Pathological and entomological investigations.. . . .	4,000 00
12. Miscellaneous..	99 06
13. Agricultural instruction in public, high and normal schools, training of teachers, grants..	20,000 00
14. University of British Columbia, College of Agriculture, Exten- sion and investigation..	20,000 00
	<hr/> \$69,199 06

VETERINARY COLLEGES

Ontario Veterinary College..	\$15,000 00
School of Veterinary Science, Montreal..	5,000 00
	<hr/> \$20,000 00

PRINCE EDWARD ISLAND

Drainage Soils and Crops.—In an effort to arouse interest in the growing of clover seed, two hundred visits were made to farmers and, as a result, about one hundred and twenty-five men each undertook to grow half an acre of clover for this purpose. It was felt that the interest manifested justified the department in purchasing two hullers for demonstration purposes.

The drainage operations, which were started in 1917 and proceeded during succeeding years, were continued until a shortage of drainage tile halted the work of the traction ditcher. All revenue from under-drainage operations is placed to the credit of the grant.

SESSIONAL PAPER No. 15a

The work to promote the use of pulverized limestone was well received. A quarry of suitable limestone was located, a pulverizer was purchased and operated, and the product distributed among the farmers. A reduction was secured from the railways on carload lots of limestone. This is encouraging the more general use of limestone for fertilizing purposes, and will greatly assist the department's efforts.

Live Stock and Dairying.—A competition among dairymen to promote interest in the improvement of herds was carried out during the year. Inspection and instruction were continued among the twenty-six cheese factories and five creameries in operation.

A dairy short course was held in connection with the Agricultural and Technical School, Charlottetown, the first week being devoted to instruction for cheesemakers and the second week for buttermakers. Fifteen of the former and eighteen of the latter attended, and the course was well received. A dairy class-room was permanently equipped at the school for dairy instruction work and is available for the use of the general students as well as for the short courses.

Short Courses.—In addition to the dairy and domestic science short courses, a general agricultural short course of two weeks' duration was held in connection with the Agricultural and Technical School. The average attendance was forty-four students at all classes, which included such subjects as live stock, field crops, motor mechanics, poultry, dairying and bee-keeping.

Co-operative Marketing.—A co-operative organization of potato growers was established for the purpose of supplying disease-free seed. Efforts were continued to encourage the co-operative marketing of lambs, and assistance was given in the co-operative sale of wool.

Women's Institutes.—Two domestic science short courses of two weeks' duration were held. Other work includes attendance at meetings of institutes, giving demonstrations and judging at school fairs, as well as teaching regular classes at the domestic science kitchen.

Elementary Agricultural Education.—Forty-four school fairs were conducted during the month of September, and in every case gave evidence of an increased interest in the work. The formation of Boys' and Girls' Clubs in a majority of the school centres added much to the interest in agricultural work, particularly in poultry-keeping. Over three thousand day-old chicks were delivered. Twenty Pig Clubs were organized and did excellent work in promoting an interest in live stock.

The Rural Science Department, Prince of Wales College, was re-established for the purpose of instructing teachers-in-training.

Technical and Agricultural School.—The opening on December 3, 1920, at Charlottetown of the Provincial Agricultural and Technical School marked the inauguration of a new departure in the educational system of Prince Edward Island. The school was officially opened by His Honour Lieutenant-Governor McKinnon, who, in a short address, declared that a more necessary institution could not have been started in the province. Principal Vernon Crockett occupied the chair, and short addresses were given by Premier Bell, Professor L. W. Gill, Director of Technical Education for the Dominion, Hon. W. M. Lea, Commissioner of Agriculture, and Mr. R. H. Rogers, Chief Superintendent of Education.

The school occupies the building formerly known as the Rena McLean Memorial Hospital. Immediately attached is an area of twenty-five acres of land, while the Dominion Experimental Station is within a few minutes' walk of the institution.

The school is primarily for the education of farmers' sons over fourteen who intend to remain on the farm, but is suitable for farmers of any age. There are no

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tuition fees nor will an entrance qualification test be required. Special attention will be given to boys whose educational attainments are deficient. The course covers two winter periods of twenty weeks each and has been formulated with the following objects in view:—

1. To give the largest amount of information and training in practical farming in the shortest possible time.

2. To train the farmer how to solve his own problems and increase his net returns.

3. To unfold to him the many opportunities on the farm and the possibilities of rural life.

4. To stimulate him for the filling of a more useful place in the social and economic life of the community.

The subjects to be taken up are farm animals, crops and fertilizers, farm machinery and engineering, commercial English, dairying, farm management, civics, horticulture, poultry, commercial arithmetic, farm economics, woodworking, and blacksmithing.

In addition to the regular course, special lectures are given by members of the staff of the provincial Department of Agriculture. The superintendent of the Experimental Farm and his staff will conduct demonstrations.

Although the only existing course not directly connected with farming is wireless telegraphy, it is hoped that the school will develop into a general agricultural and technical institution, and ample provision has been made for expansion.

The institution will be financed jointly by the Dominion and Provincial Governments. The province will provide one-third of the cost, while the remaining two-thirds will be met from the grants made to the province under *The Technical Education Act* and *The Agricultural Instruction Act*.

NOVA SCOTIA

The Agricultural College.—When aid to agricultural instruction was first extended to the provinces, it was agreed that a share of the grant should be devoted to salaries and maintenance at the Agricultural College, Truro. The claim of this institution was strengthened by the fact that the college was interprovincial in character. It was definitely understood at that time that the grant made by the province should not be reduced because of Dominion assistance. That this undertaking continues to be observed is evidenced by the fact that for the provincial fiscal year ending September 30, 1919, \$39,000 was granted to the college from provincial funds, whereas, for 1920, the amount was \$52,700.

It was further agreed that the cost of the Science building should be met from the grant, and each year the allotment for that purpose is charged with interest on the unpaid balance, while the remainder goes to reduce capital indebtedness. This building is essential to the institution, providing class-rooms and laboratories for the chemical and zoological departments as well as facilities for the women's short courses.

Agricultural Representatives.—The employment of regular agricultural representatives was temporarily discontinued except in two districts, Antigonish and Inverness, Richmond and Victoria. The department found difficulty in securing properly qualified men at the salary offered and therefore decided to employ seasonal men who were specialists in certain lines of work in a number of counties. Two men were placed at Cape Breton, one to promote co-operative dairying, and the other to demonstrate sheep dipping. In Yarmouth county a demonstrator in potato spraying

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and dusting was employed, who also organized a potato growing competition in which spraying was a condition of the contest. Experiments as to the relative merits of spraying and dusting for the control of potato blight were also carried on. Five men were employed in the province generally to carry on sheep propaganda, including assistance in the co-operative marketing of wool.

Short Courses.—During the first two weeks of January, a successful short course for farmers and farmers' sons was conducted at the Agricultural College, with 95 enrolled students. At the same time a short course for women was conducted with 29 students enrolled. Following the women's course, a week's course in home economics was provided for soldiers' wives, the attendance being 45. The special course for ex-service men, begun in October, 1918, was continued, although the present course is likely to be the last.

Local courses were held at four of the points where buildings have been provided for this purpose, and also to serve as community halls, namely at Lawrence-town, Yarmouth, Musquodoboit and Stewiacke. Attendance, 75 to 150. The instructors were members of the staff of the college assisted by Dominion officials. There are now in Nova Scotia seven buildings of this character, the cost of which was defrayed in part by the grant, although in each case the community made a substantial contribution. The average amount allowed from the grant was about \$1,200.

An effective feature of the short courses was the employment of motion picture films made in Nova Scotia. Films on cream grading, co-operative wool selling, poultry keeping, and the growing of oats, peas and vetches for silage were used and proved of greater educational value than those from outside sources.

Dairying.—The creation of the Dairy Division of the Nova Scotia Department of Agriculture was concurrent with the receipt of the first Agricultural Instruction grant, and with the exception of half the superintendent's salary all expenses are paid out of that grant, including the railway fares of delegates in attendance at the annual dairy convention.

Field Crop Demonstrations.—Some excellent work was done during the year in encouraging clover seed growing, in promoting registered seed oat production, and in providing a special competition in potato growing. Demonstrations with the clover-huller were continued.

Women's Institutes.—The work of this branch in organizing institutes, addressing meetings, and conducting short courses was aggressively carried on during the year. The annual convention was held at Truro in June, and in July a short course for young girls was conducted at the college. The January short courses in home economics have already been referred to. All the expenses in connection with the Women's Institute system of this province, as well as those incurred in connection with the instruction classes are met by the grant.

Entomological Work.—Special investigations for the control of insects injurious to vegetable crops are being carried on under the direction of the provincial entomologist, including the cabbage maggot, carrot rust fly, onion maggot, pea moth, and the potato beetle. The experiments with the cabbage maggot yielded most gratifying results. The value of corrosive sublimate has been confirmed, in agreement with the experiments conducted at Ottawa, Guelph, and Vernon, B.C. Experiments have resulted in the discovery of other remedies which appear to be superior to those used hitherto. Among them is a cresote dust, prepared at a merely nominal cost. The brown-tail moth appears to be well under control.

Apiary Inspection.—The districts in which foul brood was formerly found to exist were reinspected during the year without any trace of the disease being discovered. Instruction and inspection in modern methods of bee-keeping was continued.

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RURAL SCIENCE WORK

The 1920 session of the Summer School of Science was in many ways the best yet held. The community or social centre idea was exemplified by the transformation of a room in the Normal College into a community hall, and the success met with tended to show that one of the needs of young people everywhere is a social centre of this kind. The enrolment was 108; of this number 19 were awarded diplomas, 46 one-year certificates.

School Fairs.—The number of school fairs held was 315, in which 240 schools took part. During the winter months the special training to teachers who are taking their course at the provincial Normal College occupies most attention. The Director of Rural Education, Mr. L. A. DeWolfe, is convinced of the necessity of still greater efforts being spent in this direction, as the success of rural science teaching depends largely on teaching qualifications. He is of the opinion that the outlook is encouraging, and that more effective work generally is being accomplished.

NEW BRUNSWICK

The funds provided under the Agricultural Instruction Act are used in connection with provincial funds for carrying on the general work of the several divisions of the provincial Department of Agriculture.

Agricultural Representative Division.—For this work the province is divided into four groups of counties with a representative for each. The details of the work vary in each district, but in each case assistance is given in carrying on the extension activities undertaken by the department, including sheep and wool demonstrations, field crop and acre profit competitions, the organization of cow-testing associations, and the formation of clubs for the purchase of pure-bred sires. Other activities included judging at seed fairs, assistance to the Farm Settlement Board, and similar undertakings.

Live Stock Division.—The work assisted included demonstrations in sheep husbandry, co-operative wool marketing, stallion inspection, and Boys' Pig Clubs. Twenty-two of these clubs were in operation. They are financed from outside sources but are supervised by the department.

Soils and Crops Division.—The work assisted by the grant in this division included (1) operating a clover-huller; (2) underdrainage surveys and traction ditcher demonstrations; (3) encouragement of the use of pulverized limestone for the liming of soils; (4) conducting experimental plots to popularize the ensiling of forage crops. These plots were established in different parts of the province on farms having silos or where same were being built. Data will be secured as to cost of constructing silos of different types, as to the suitability of different crops for ensilage, and the cost of producing same. It is hoped in this way to assist dairymen in solving the problem of high cost of milk production and to promote the introduction and use of the silo.

The clover huller was at the disposal of any agricultural society or any group of five farmers having ten acres of clover hay for threshing. The machine was operated at a fixed charge per hour. Half rates for the transportation of this machine were obtained from the railway. The output was 20,000 pounds of seed.

The traction ditcher was demonstrated, and surveys were made for 28,000 feet of tile, together with plans and estimates.

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Poultry Division.—The demand for eggs and chicks is reported to have been greatly in excess of the supply obtainable from provincial sources, and importations were necessary. In all 6,586 hen eggs and 1,090 day-old chicks were distributed.

Horticultural Division.—From the third week in January to the end of March, eighty-two visits to fruit growers were made, chiefly for the purpose of giving pruning demonstrations. During the period nine counties were covered, and 4,260 trees of various ages pruned.

Short Courses.—A short course in agriculture, of ten days' duration, was held at the Vocational School, Woodstock, in January, and was followed by similar courses at Moncton and Chatham under the direction of the agricultural representatives. The instruction work was performed chiefly by the officers of the various divisions of the department. In the French-speaking districts, instructors who spoke French were provided.

The special school or course of instruction for young men in dairying was conducted with the co-operation of Nova Scotia and Prince Edward Island, as in previous years. An apple-packing school organized at one of the fruit centres by the horticulturist was well attended. Short courses in household science were conducted both in English and in French by the Women's Institute Division.

Entomological Division.—The extension work of the division is almost entirely of an educational character and is carried on in connection with the schools of the province. It consists largely of assistance to teachers and loaning demonstration material to enable them to teach nature study and elementary agriculture. The system results in a large number of specimens being sent by teachers and schools to the division for identification. Some 700 sets of nature study notes were supplied to teachers; 152 collections were loaned to schools. The lectures to teachers, students and farmers numbered 44.

Women's Institute Division.—Spring classes in cookery, sewing or millinery, and nursing were held under institute auspices at seven centres and also at five centres in the French-speaking districts. Demonstrations in the food value and practical uses of milk were given throughout the French-speaking districts similar to those conducted in other parts of the province in the year previous. A start was made in the organization of Junior Institutes, of which several were formed.

Elementary Agricultural Education Division.—An important feature of the work of the director and his assistant consists of visits to schools in connection with the organizing and inspection of home plots, school gardens, poultry clubs, and school fairs, and in giving instruction in nature and agriculture in the schools.

Seed distribution to school children comprised 4,523 lots of seed, and 1,009 dozen eggs were sent to school poultry clubs with full instructions for hatching and rearing.

A Rural Science School and Camp for teachers is held annually.

QUEBEC

Agricultural Representatives.—The number of agricultural representatives (agronomes de district) was increased during the year from 35 to 48. Special efforts were made to develop the sheep industry and many demonstrations in sheep husbandry were given. Every effort was also made to advance the dairy industry through better breeding and cow-testing. A total of 2,470 demonstrations and lectures was held, and many visits were paid to individual farmers, particularly in connection with crop and other competitions and vegetable-growing contests.

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Field Husbandry.—The work carried on under this division included field crop competitions, seed competitions, demonstration fields, and the production of clover seed. The field crop competitions numbered 138, and in addition a special seed competition was conducted, involving the inspection of the standing crop and later of the grain after threshing and cleaning. Nineteen such competitions were carried on and 672 farmers participated.

The demonstration fields, from one to three acres in extent, to the number of 98, were established in all parts of the province. Their object is to demonstrate improved methods of farming, including rotation of crops, root and cereal culture, and the production of clover seed. Seed and fertilizers are supplied free, and operations are supervised by the department. Clover growing for seed is on the increase in the province, and is being assisted not only by the plots referred to but also by the demonstration of clover threshers whereby clover is threshed free of charge for farmers taking up clover-growing in parishes having no thresher and where no such demonstration had been given previously. The quantity of clover seed harvested in 1919 was close to a million pounds.

The success of the movement for the production of better seed is proving highly gratifying to the officers of the department. Seed-growing centres were organized in various districts, and particularly in the districts of Ste-Rosalie and Berthier. All the seed plots were carefully inspected by the provincial officer in charge of the work, accompanied by the secretary of the Canadian Seed Growers' Association. The Ste-Rosalie centre comprised 27 farmers, with an estimated output of 20,000 bushels of Banner oat seed.

During the summer a survey was made of the Lake St. John district by officers of the provincial department, with the assistance of the Dominion Cerealists, with a view of organizing the farmers for the growing and marketing of pure seed. The farmers of this district have always experienced great difficulty in procuring good seed of suitable varieties, and a solution of the question was urgent. As an outcome, the building of a warehouse was entrusted to the Ste-Rosalie Co-operative Association, with the understanding that the department is to assist in the work of organizing.

A station for the selection and multiplication of elite seed was established at Ste-Rosalie as a result of the efforts of the provincial department, assisted by the Dominion officials, the Macdonald College, and the Ste-Rosalie Co-operative Association of Seed Growers. The product of this station will be propagated at the various seed-growing centres already established in the province. The Ste-Rosalie Association contributes 100 acres to the undertaking, which will be in charge of the cerealists of Macdonald College. Varieties tested at the Experimental Farms and on the college plots and proved suitable will be multiplied in this way and distributed throughout the province.

Building Plans.—The Field Husbandry Branch supplies plans for farm buildings to those applying for same. Its experts give advice on the spot on ventilation, water supply, and similar subjects.

Horticulture.—The demonstration fields operated during the year were as follows: tree fruits, 31; small fruits, 53; potatoes, 42; tobacco, 10; vegetables, 11; sugar-beets, 31; total, 178. The spring distribution of fruit trees sold to association members numbered 17,425. Strawberry plants to the number of 250,000 were procured and sold to growers at low cost. It is the intention to make the demonstration fields for small fruits centres of propaganda and plant distribution in their respective districts. No new demonstration orchards were established.

The tobacco demonstration fields were established this year for the first time. The plots were of one acre each, and variety tests are being conducted, which will continue for five years.

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The potato demonstration fields were chiefly in three counties. For each of the plots seed was supplied for planting one acre, as well as chemicals, spray pumps, and fertilizers. In this connection four provincial officers were trained in potato inspection work by the Dominion Department of Agriculture.

Insects and Plant Diseases.—The Division of Entomology consists of an entomologist and three assistants. The main endeavour is to demonstrate the value of spraying and the treatment and improvement of seed, including potatoes. Instruction in spraying, chiefly of potatoes, was undertaken in forty counties, and in addition some fifty lectures and forty demonstrations of various kinds were given.

Poultry Husbandry.—Nine travelling instructors were employed in teaching artificial incubation and brooding, and in supervising the work of the fifteen poultry stations. Four stations are equipped with incubators capable of handling from 2,500 to 10,000 eggs. The division also employed five instructors, whose work included the inspection of poultry flocks and attendance at the thirteen winter poultry fairs.

Short Courses.—Short courses in agriculture were held in fifty-five localities from January 1 to April 1, and the number of lectures and demonstrations given was 926. Short courses in housekeeping and agriculture for women were held throughout the year to the number of 1,863 in 102 different localities.

Domestic Science Schools.—The Domestic Science schools numbered 61. Financial aid is given in the form of grants, and the work is regularly inspected. In the rural domestic science schools the course includes instruction in gardening, poultry-keeping, dairying and weaving. An Agricultural Domestic Science school was established at St. Damien during the year, to which only farmers' daughters who have completed their general education are admitted. The course is one for practical farm housekeeping.

Maple Sugar.—Only one sugar-making school was operated—that is at Ste. Louise—but the number of instructors employed was increased to six, and seventy-nine demonstrations were given in nineteen counties. The provincial bureau of statistics gives the 1920 production for Quebec province as follows:—

Maple sugar manufactured.. . . . .pounds	15,615,141
Value at average selling price of 20 cents per pound.. . . .	\$3,123,028
Maple syrup manufactured.. . . . .gallons	1,449,649
Value at average selling price of \$2.50 per gallon.. . . .	\$3,624,123
Total value of sugar and syrup..	\$6,747,151

School Agriculture.—Elementary agriculture is taught in all primary schools and also in the normal schools. School gardens are organized in a large number of school municipalities, although home gardens are more general; school fairs are the outcome. Agricultural education for boys is provided at the School of Agriculture at Oka, Ste. Anne de la Pocatiere, and at Macdonald College; for girls at the superior domestic science schools at Roberval and St. Pascal.

School and Home Gardens.—The spring distribution of seed to school children was 140,000 packages. The large increase in the applications for potatoes for school gardens made it impossible to supply all applicants.

Number of schools having a garden..	218
Number of children gardeners at home and school.. . . .	31,217

School Fairs.—The fairs were very successful, judged by the number of entries and the quality and uniformity of the exhibits. As many as eight school fairs were held in some districts, the average per district being four. At one fair 140 samples of potatoes of one variety were shown. The children and their parents took a great

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deal of interest in the school fairs, more even than in the county fairs; in fact, no better exhibits of vegetables were seen at the regular exhibitions. After judging the products, the judges give a lecture and supply useful information on the exhibits.

MACDONALD COLLEGE

A summary is presented of the work carried on by Macdonald College under the Agricultural Instruction Act during the year.

Animal Husbandry.—An animal husbandman was employed who has charge of the college sheep work, including teaching and extension work.

Biology.—An assistant in entomology and zoology was engaged, who, in addition to teaching, undertook to make studies on several insects of economic importance.

Cereal Husbandry.—The main effort of this division was toward generalizing the use of superior varieties of crops. Assistance was also given to the general campaign carried on in the province for increasing the supply of good seed, working in co-operation with the Quebec Department of Agriculture and the Quebec Co-operative Society of Seed Producers.

Horticulture.—The distribution of vegetable and flower seeds to the children of the rural schools was continued, and lecturers and judges were provided.

Household Science Extension.—This department superintends the Quebec Women's Institutes, 55 in number. Fifty-three demonstrations were given, and a two-day convention was held at the college. The staff also assisted at the short course for soldiers' wives. In addition, one hundred and six demonstrations were given to school children during the summer months.

Poultry Husbandry.—Twelve demonstration flocks were operated and served as a partial source of hatching eggs for school fair work and as centres for the distribution of pure-bred stock. The culling of flocks and the marketing of eggs and poultry received special attention. Over seven hundred sittings of hatching eggs were distributed to school children.

Extension.—Extension work in schools was confined to four counties, owing to the provincial authorities having taken over the direction of school fairs in counties where there are agricultural representatives. One hundred schools and two thousand children took part in school fairs under Macdonald auspices. Nine fairs were successfully carried through. During the summer months the children were gathered at convenient centres and instruction was given them in household science, agriculture and nature study.

Veterinary Science.—Four courses were given to agricultural students. Veterinary science is now a major subject for intending specialists in animal husbandry. Some professional, research and extension work was also undertaken.

Summer School for Rural Improvement.—A summer school for country clergymen and others interested in rural welfare was held in the month of August, with an attendance of 74.

Short Course.—A short course in animal and cereal husbandry lasting for one week was held at the beginning of March, with a registered attendance of 28.

General.—Assistance is given to the agricultural representatives in connection with the organization of farmers' clubs, egg circles demonstrations, school fairs, and various other forms of work coming under their jurisdiction. .

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ONTARIO

Ontario Agricultural College Building.—For the past few years a portion of the grant has been set aside for the construction of a boys' dormitory in connection with the college. This building was planned and approved early in the war, but actual construction was deferred until the close of the war owing to war demands on labour and materials. In the meantime costs advanced, and the contract was let for the building at about \$145,000, apart from furnishings and other extras. The building is of stone construction, simple, but attractive. It provides accommodation for one hundred and fifty boys, and will prove a very valuable addition to the equipment of the college. It supplements the old residence, which accommodates upwards of three hundred boys. It was finished in December, 1920, and occupied for the first time. It was designated as "Mills Hall" in order to perpetuate the name of Doctor James Mills, who for twenty-five years was head of the college. This is the last of a series of buildings which have been made possible through the financial assistance of the Agricultural Instruction Act, and which have added greatly to the facilities for practical agricultural education. Other buildings erected out of these moneys include the Field Husbandry building, Poultry building, Physics building, and a substantial addition to the Chemistry building.

College Salaries and Expenses.—With this appropriation additions have been made to the staff which have greatly strengthened the teaching and research work in physics, chemistry, and dairying.

Kemptville Agricultural School.—The main work of the past year has been the addition of an Engineering building and the completion of the main building for teaching and laboratory work. Equipment was purchased for both in order to be ready for the formal opening of regular course work in the autumn of 1920. As far as teaching and general farm work are concerned, very little further capital expenditure will be necessary, but the addition of a residence for students is essential for the success of the institution in view of the impossibility of securing adequate accommodation in the village.

Kemptville Agricultural School Maintenance.—In addition to the regular farm maintenance, it was necessary to appoint a teaching staff for the term. Two permanent teachers were added to the staff on the year-round basis, and the balance of the work of instruction was given by well-qualified men who were secured only for the length of the term.

With the school thus established as a going concern it is gratifying to report that a splendid start has been made. The regular two-year course, which opened in October and continued until April, was attended by twenty-five boys from eastern Ontario farms. The course was planned along practical lines and was calculated to make those who took advantage of it better farmers. A three-weeks' course was put on during the winter months, and was attended by seventy-three boys. It is hoped another year to add courses for girls in domestic science. In addition to this work, the institution had been playing a large part as an object lesson in good farming, and a centre from which good seed and good stock are distributed. The claim has been made that this institution during the past year distributed more pure seed than any other Government institution in Canada. The seed distributed includes Banner oats, O.A.C. 21 barley, Arthur peas, Huron wheat, and sweet clover. Some twenty-five or thirty pure-bred animals, male and female, have been distributed in the district. Both seed grain and pure-bred stock have been sold at current prices, and the distribution will have a beneficial influence on agriculture in eastern Ontario. Furthermore, the institution is developing as a real community centre. At the farm during the year

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there were held one pure-bred bull sale, one general sale of pure-bred stock, a ploughing match, and several field days for junior farmers. At the formal opening exercises in February there were over one thousand people present.

Agricultural Representatives.—Practically one-half of the agricultural representative work in the province was financed under this appropriation. There are now forty-eight local offices in this system in Ontario, and each office carries on a great many uniform lines of work as well as work specially adapted to local needs. Various features of this work have been reported upon in different forms from time to time, and it is therefore unnecessary to elaborate here.

Household Science Extension Work.—Under this appropriation a woman home demonstrator is carrying on work in Peel county. She occupies the same office as the agricultural representative, and works in co-operation with the agricultural representative except that her efforts are devoted to the interest of the women and girls. She has been very successful in conducting classes of girls in domestic science, and is carrying on educational work of a practical nature in the interests of better home-making.

Co-operation and Markets.—The grant maintains a branch of the department which is entirely devoted to encouraging co-operation and disseminating information on co-operative organization and marketing and community efforts of various kinds. During the past year there was considerable demand for work of this nature. Many farmers' clubs and other local marketing organizations applied for assistance and advice in methods of book-keeping and other points of business management. A large number of new companies were formed, and their applications for incorporation were inspected and reviewed by this branch. There was also a big demand for information on community halls which are financially assisted under provincial legislation.

Demonstrations in Vegetable Growing.—Work in the interests of the commercial vegetable-growing industry is carried on under this appropriation. A very capable vegetable specialist devotes his whole time to this work, assisted during part of the season by men who have taken up special branches. The work has been carried on along certain definite lines, namely, educational work, disease and insect control work, fertilizer experiments, and potato inspection and improvement. As to the educational work, a great many three-day short courses for vegetable growers were held during the winter at vegetable centres, and were attended by from twenty-five to forty growers. Lectures were given to all the agricultural classes, and field days were conducted during the growing season. Extensive work was carried on during the growing season in demonstrating the most effective methods of controlling cabbage maggot, onion maggot, celery blight, and pests. A number of demonstrations were also conducted in the use of commercial fertilizers. In reference to potato improvement work, the vegetable specialist co-operated with the federal officials. In all 472 acres of potatoes were inspected in northern Ontario, and 256 were placed in grade 1 and 128 in grade 2.

O.A.C. Short Courses.—Under this appropriation twenty-two farmers' sons were given a free short course of two weeks at the Ontario Agricultural College, Guelph, and fifteen boys were given a free two-weeks' short course at the Kemptville Agricultural School as the result of winning competitions in their respective counties in acre profit and live stock profit competitions. In addition considerable valuable experience in the best methods of production and in the cost of production was brought to the attention of a large number of young farmers.

Women's Institute Work.—Supplementing the regular provincial appropriation, this money was used in extending the work of instruction in home nursing, sewing,

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and domestic science carried on through the Women's Institutes of the province. Altogether 106 of these courses were held for a period of two weeks each, and 3,810 women took advantage of them for the entire course while a very large number of others were in attendance at parts of the course. Home nursing appears to be a subject on which there is the greatest demand for instruction in the rural districts at the present time.

Short Courses for Poultry Judges.—During the summer a three-days' poultry course was conducted at the Ontario Agricultural College for the men engaged in managing and judging local poultry shows. Throughout the course emphasis was placed on the importance of uniformity in methods of judging and the value of utility in poultry, and arrangements were made for show dates so that judging could be carried on with the least loss of time and the greatest amount of instruction.

Lectures on Horticulture.—In the towns and villages of the province there is a growing interest in horticulture, both as regards beautifying home surroundings and beautifying community centres. This interest was further developed by supplying speakers to give the latest information on the subject where such were asked for by horticulture societies.

Demonstrations in Growing and Handling Fruit.—The grant financed work in the Niagara district, supplementing work carried on by the Vineland Experimental Farm.

Demonstrations with Fruit and Vegetables in Northern Ontario.—Part of the farm near Fort William which was established by the Government as a prison farm has been utilized to develop hardy fruits, vegetables, and shrubs suited to the climate and soil conditions of New Ontario. This work has been financed out of the appropriation. Considerable preliminary work has been accomplished, and plans are now ready for very important developments which promise to be of much value to the district.

Horticultural Experiment Station.—Experiments in the handling and commercial use of by-products from fruits were carried on under this appropriation. War conditions interfered greatly with the original plans, and early in the year the man in charge of the work resigned to go into commercial work, and it was decided to discontinue the work in the form originally intended; consequently very little of this appropriation was used.

Demonstration Work on Soils.—This work has been interfered with considerably by death of members of the staff. The general soil survey of the province has, however, been pretty well finished and the staff is now engaged in the task of tabulating results and preparing charts and maps. In addition three demonstration plots have been established to demonstrate the treatment of different types of soil. These plots are located as follows: Wellington county, on the college farm, soil, loam; Norfolk county, near Simcoe, very light sandy soil; Welland county, near Welland, heavy clay. Some interesting and promising results have already been secured from the operation of these plots, but it is necessary to check up the results over a period of years before announcing definite conclusions.

Demonstrations in Bee-keeping.—This appropriation enabled officers of the department to extend the work of instruction in bee-keeping in various sections of the province. Instruction is particularly necessary and in demand with reference to the control of American and European foul brood as well as on the general methods of modern apiculture.

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Demonstrations in Corn Growing.—For the past few years some very useful work has been carried on with a view to improving and standardizing varieties and extending the use of the best varieties of corn produced in southwestern Ontario to all other parts of Ontario where corn for ensilage purposes is now grown extensively. Early in the year the corn specialist resigned, and in view of the proposal to establish a farm in southwestern Ontario in the special interest of corn, sugar-beets, beans, and tobacco, no further appointment was made. Future plans for this work will be contingent upon the final decision in regard to the farm referred to.

Drainage Work.—Shortage and high cost of labour and materials have curtailed the work of draining the farm lands of Ontario during the past year or two. Notwithstanding these factors, however, the drainage staff last year made surveys and plans for 129 farmers. In addition, courses of instruction were conducted for ditching machine operators.

Elementary Agricultural Education.—By virtue of this appropriation the Education Department has carried on a considerable portion of its programme for developing the teaching of agriculture in the public schools and high schools. Short courses for teachers, inspectors and others were, as in former years, conducted during the summer at the Ontario Agricultural College and other centres. They have all been largely attended and the work was given a genuine stimulus.

MANITOBA

In Manitoba the agriculture representatives, Women's Institutes, Boys' and Girls' Clubs, poultry extension work, and some other activities comprise what is known as the Extension Branch of the Department, and constitute the leading lines of work assisted by the Agricultural Instruction grant.

Agricultural Representatives.—On account of the war and the scarcity of qualified men, the growth of the system has been slow up to the present. Five offices were open during the year, and the representatives devoted their attention to field crop improvement, Boys' and Girls' Clubs, organization of Live Stock Clubs for the introduction of pure-bred cattle, sheep and swine, assisting agricultural societies, and judging at fairs. In some instances they acted as secretaries of rural credit societies, conducted labour bureaus and served on the boards of various local organizations. In connection with co-operative organizations, while not acting as managers, they assist in an advisory capacity. The usefulness of the representative in a case of emergency, such as the grasshopper outbreak, was clearly demonstrated. The department provides from the Dominion grant the greater part of the salary of the representative and his travelling expenses, including mileage of car when on official business; the municipality is responsible for the office and its equipment, a stenographer, and funds for carrying on the work.

Boys' and Girls' Clubs.—The importance of this work is becoming more and more evident each year. New clubs continue to be added to the already long list of those in operation. The training of demonstration teams for girls in cooking, canning and dyeing, and of cow-testing teams for boys was undertaken and the outcome was markedly successful. The employment of demonstration teams is a new means of teaching house-keeping methods. In August the teams were judged and, later, 66 girls, representing 22 communities, were given a week's trip to Winnipeg as guests of the department and of the T. Eaton Company. These teams exhibited over 600 jars of canned fruit and vegetables at the Garden Show. During the year two bulletins were issued to the clubs, and 6,000 copies of each distributed. At organiza-

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tion meetings motion-picture films are used to demonstrate interest in club work. The total number of boys and girls taking part in the movement during the year was 26,500.

The Boys' and Girls' Club Fairs held in the fall numbered 208, with an attendance of 28,000 adults and 26,000 children. Members of the Agricultural College staff and the Extension staff did the judging of the exhibits.

Women's Institutes.—Courses in dressmaking, millinery and cooking are held both in the spring and fall. The opening courses were attended by over 6,000 persons and the fall courses by over 8,000. Institute meetings are held throughout the province from November 1 to March 15, and district conventions during the summer, the department supplying speakers and demonstrators.

Poultry Work.—The work was divided into two sections: (1) Lectures and demonstrations at the Brandon Normal School, and (2) Investigating egg-marketing conditions. At the normal school the lectures dealt with the breeding, feeding and marketing of poultry, while the practical work consisted of operating an incubator, identification of breeds and candling eggs. The investigations into marketing conditions were conducted with a view to improving the prevailing system and the introduction of needed legislation dealing with the matter.

Dairying.—The work in connection with dairy instruction comprised visits to creameries and cheese factories to assist makers, the grading of butter, and addressing meetings. Many of the meetings were held in the newer districts away from the railway.

Extension Schools.—Farmers' Extension Schools, held during the winter months, dealt with the following topics: Gas-engines, live stock, field crops, dairying, and poultry keeping. Of these the gas-engine course proved the most popular, and combination courses, such as gas-engine and live stock, were not found satisfactory.

Killarney Demonstration Farm.—The object of this farm is mainly to demonstrate the possibilities of growing fruit in southwestern Manitoba, and to test the suitability of varieties for that region. An endeavour is also made to encourage the improvement of homesteads by the planting of flowers, shrubs, trees, etc. Experiments are being conducted with currants, gooseberries, strawberries, and vegetables, and also with tree fruits.

SASKATCHEWAN

The funds provided for the use of the Saskatchewan Department of Agriculture under the Agricultural Instruction Act are expended on five divisions of work in approximately equal amounts, namely: Better Farming Train, the Live Stock branch, the Field Crops branch, the Co-operative Organization branch, and the Dairy branch.

Better Farming Train.—During the year a Better Farming Train was operated under the co-operation of the College of Agriculture of the Provincial University, the Provincial Department of Education, the Canadian Pacific and Canadian National Railways. It consisted of a train of seventeen coaches, and operated over the Canadian Pacific and Canadian National lines in the northern part of the province; sixty-two points were visited, with a total attendance at the train and lectures of practically 25,000 men and women, boys and girls. The train was fully equipped as an agricultural college on wheels, with dormitory and dining hall accommodation. Four cars were devoted to live stock, one to poultry and dairy, one to agricultural engineering, one to mechanics, one to field husbandry, two lecture cars, one lantern car, one for

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school children, one for women's work, a nursery car, dining car, sleeping car, and accessories. The cars were equipped and staffed as far as possible from the College of Agriculture. Good specimens of utility stock were carried for demonstration purposes. One of the principal lessons taught was that of the value of the good pure-bred sire. Types of horses, cattle, sheep, swine, and poultry were selected with this purpose in mind. The field husbandry car carried samples of a great variety of crops, grain, forage, roots, and silage that can be grown successfully in Saskatchewan, and endeavoured to teach the principles that underlie successful crop production. And so with the other cars—all were equipped for teaching. Thousands of school children with their teachers and inspectors visited the train during its tour.

In July the department co-operated with the various Experimental Farms in the province to the extent of advertising and arranging for automobile and train parties to visit the farms. From four to five hundred people a day for four consecutive days visited the Scott farm from a radius around that point of from 50 to 75 miles. At the Indian Head and Rosthern farms the excursions were not quite so well patronized. In July a Better Farming Conference to discuss conditions in southwestern Saskatchewan was convened at Swift Current and attended by eminent agriculturists from the States, Western Canada, and representative farmers of that area.

Live Stock.—The portion allotted to live stock work was expended chiefly in paying entire salary and expenses of an instructor and demonstrator. This instructor is a doctor of veterinary medicine, and is well qualified to undertake educational and scientific work. A share of the expenses was also paid of two other instructors who were engaged in instructing stockmen in the production of better cattle and better sheep. Another portion was expended in defraying the expenses of a Veterinary Summer School held at the university each year.

Field Husbandry.—Under the Field Crops Branch, the salary and expenses were paid of six men in connection with inspection of standing crops of grain and potatoes eligible for registration under the regulations of the Canadian Seed Growers' Association. The plots and fields inspected, numbering 429, comprised 8,700 acres of crop. An Interprovincial Weed Special was run for two weeks in the province; two meetings a day were held and twenty-four points in the southwestern portion of the province visited. The salary and expenses were paid of three instructors on weed control who accompanied this train. A Field Crops Instruction car was operated for ten weeks in connection with the Dairy Instruction car and the salary and expenses of four instructors were paid. These men gave instructions in better farming, including best tillage methods, choice of crops, rotation, etc. Sixty points in the southwestern portion of the province were visited, covering total attendance of 12,962.

Co-operation and Marketing.—The Co-operative Organization branch continued its activities in gathering and disseminating information relative to lines of co-operative work applicable to Saskatchewan conditions. As in 1918, special attention was given to the organization of co-operative live stock marketing associations, and during 1919, 52 associations marketed 784 cars of live stock; 553,388 pounds of wool were handled, covering over 1,100 consignments. This wool was graded by representatives of the Federal Sheep and Goat Division. In the spring of 1920, the handling of Saskatchewan wool was taken over by the Canadian Co-operative Wool Growers, Limited. Co-operative horse sales were organized in 1919 and held at seven different points. An evidence of how the work is appreciated is shown in the fact that in 1920 no less than 22 sales were organized. Part salary and expenses were paid of an instructor under the Egg Marketing Act. This instructor is a specialist in this line of work.

Dairying.—The butter-grading service, under the Dairy branch, is conceded to be a very valuable educational feature among creamery men. In 1920 as in 1919,

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grading stations were operated at Saskatoon and Regina. The main result of the grading service has been a much higher and more uniform standard of good quality butter throughout the creameries, which means better marketing, and demands in turn a more satisfactory price paid to the producer. For the year 1919, 6,630 samples representing 4,234,349 pounds were scored for 38 creameries, while in 1920, 7,102 samples representing 4,749,626 pounds were scored for 44 creameries. Government grade certificates were issued covering all samples, and 21 cars were regraded for commercial use. A new feature in connection with the grading work has been the making of a moisture test, and grade certificates were refused on any churning found to contain moisture in excess of legal standard. An instructor with a knowledge of several European languages as well as English worked almost continuously among non-English settlers, holding meetings and visiting homes, giving first-hand instruction in methods of production, handling and marketing. Educational exhibits were staged at some of the large exhibitions. With the assistance of the Canadian Pacific Railway, a Dairy car in connection with our Field Crops car was operated in 1920 for ten weeks, stopping at sixty points, with an attendance altogether of practically 13,000 people. The itinerary of this train covered 840 miles of railway. A self-generating picture machine for use in public schools was purchased, together with three educational films.

COLLEGE OF AGRICULTURE

The money received by the university through the Provincial Department of Agriculture from the Federal instruction grant to agriculture during the year was expended in payment of salaries to men on the permanent staff engaged in teaching, investigation and extension in field husbandry, animal husbandry, poultry, dairy, farm implements and machines and chemistry; for men directing field and animal husbandry investigations and demonstrations; for director and assistant director of women's work and for temporary workers and expenses in connection with homemakers' conventions, short courses and other rural women's organizations. The work carried on is practically the same as that reported for previous years varied to suit conditions and circumstances. In addition to the regular teaching, investigation and administrative work at the university, all the members of the staff devote more or less time to extension activities. The members of staff now being paid from the fund are as follows: Professor A. M. Shaw, Animal Husbandry; Professor R. K. Baker, Poultry; Professor A. E. Potts, Dairy; Professor L. E. Kirk, Field Husbandry; Professor L. M. Winters, Animal Husbandry; Miss Abbie DeLury, Director of Homemakers' Clubs; Miss Esther Thompson, Assistant Director Homemakers' Clubs; Mr. Robert Stewart, Field Superintendent, and Samuel Wright, Field Superintendent. (Chemistry was dropped from this fund.)

Owing to increases in salaries and expenses, the fund is not large enough to take care of all who were originally paid from it. The work in all the departments is expanding.

The regular agricultural extension work is carried on principally through the agricultural societies, of which there are now 141 whose activities are supervised by the Director of Extension, through Grain Growers' Associations and through any other agencies with which the Director of Extension may be able to co-operate. The Better Farming Train and the exhibition associations afford excellent opportunities for reaching very large numbers of people whose interests lie chiefly in agricultural pursuits.

Farm Boys' Camps.—The farm boys' camps held under the auspices of the College of Agriculture, and organized by the Director of Agricultural Extension, proved very successful. There were 245 farm boys in attendance at the Regina camp and 175 at the camp at Saskatoon. An entirely different programme was arranged for

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each camp, the intention being that the boys should begin their course at Regina and complete it in the subsequent year at Saskatoon. At the latter camp the experimental plots at the university are made use of, grain crop judging and identification contests being staged.

The camp movement is being developed as a feature of the agricultural societies so as to enable these societies to render a definite service to farm boys. The local society assists boys in making financial and other arrangements in connection with the purchase of live stock necessary for the projects designed by the college for boys who have attended a camp. It is necessary that a boy must first qualify by attending one or more camps. The contests are definitely vocational and are regarded as being more advanced than Boys' and Girls' Club work, as usually carried on. Special prizes were offered at the winter stock and poultry shows to the contestants. The girls' camps are referred to under "Women's Work."

Women's Work.—There are now 160 Homemakers' Clubs distributed over the province. The work is continually expanding. Lectures are given to the clubs and to community gatherings of farm women. From July to the end of December, 52 short courses from two to five days' duration were held. These included instruction in home nursing, emergencies, household science, child welfare, dressmaking and millinery. Judges were sent to forty-five fairs. Addresses were given at some of the fairs. This work was carried on not only with the Homemakers' Clubs but also with other organizations that asked for help. Child welfare and clinics are getting to be a general feature of homemakers' work.

This year (1921) the homemakers' organization is providing a household science scholarship to train a teacher who will give at least three years of her services to non-English districts in order to acquaint new Canadians with Canadian habits of living. This way of trying to solve the problem of the new Canadian is recommended to other organizations interested in this work. Physical training of a recreational kind for rural schools is also urged. Efforts for relief work in the province are being carried on in co-operation with the Red Cross.

To encourage permanent libraries a grant is made of dollar for dollar up to ten dollars expended by a club for books, and 38 clubs have availed themselves of this offer.

The girls' camp held at the university during the week of June 7, 1920, was attended by 67 girls from the agricultural societies. Lectures and demonstrations covered the usual work of the home and included reading, music and community singing.

At the annual convention held at the university in June, there were 375 delegates in attendance.

ALBERTA

Schools of Agriculture.—The major portion of the grant to the province of Alberta is employed in connection with the Schools of Agriculture established by the provincial Department of Agriculture in different sections of the province. Six of these schools are now in operation with a total attendance of 500 students. There are from six to eight instructors at each school. The grant contributes chiefly to salaries, but is also used for the purchase of equipment and supplies for laboratories and workshops. During the summer months when the schools are closed, the teachers undertake extension work for Women's Institutes, assist school fair work, judging at fairs, and lecture and demonstrate over the country. This year a School of Agriculture exhibit was made at the Calgary and Edmonton fairs.

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Women's Institutes. The expenditure under this heading is chiefly for salaries and travelling expenses of lecturers and demonstrators and of those directing the work. During the early summer months a staff of ten instructors was employed in giving courses lasting from one to three days in the various institutes throughout the province in household science, sewing, nursing, etc., the grant providing for operating expenses, including material and supplies.

Agricultural Representatives.—Two district agents operated during the year, one at Sedgewick and one at Edmonton, but, in addition, certain of the teachers at the agricultural schools function in a similar manner during the summer, assisting with school fairs, pig, poultry and calf clubs, holding meetings and giving assistance to farmers in any way they can. The expenditure under this head represents salaries and travelling expenses, distribution of seed to school children and materials and supplies incidental to the work.

BRITISH COLUMBIA

The work of the provincial Department of Agriculture assisted by the grant during the year was of the same character as that outlined in the report of 1919-20, and related to various forms of instruction and investigation. Assistant agriculturists and horticulturists represented the department in certain districts and aided in carrying on its work.

Dry Farms and Field Crops.—The dry-farming station at Quilchena, which is operated chiefly as a demonstration sheep farm, was maintained, but the 105-mile station was discontinued. At the demonstration plot at Pitt Meadows the work was confined chiefly to crop and variety tests.

Silo Demonstrations.—There being no silos in the Nechaco valley, two were built under the supervision of the department and filled by the department's silo filler. The construction of silos at several other points was supervised, a large number being built under departmental instruction and advice, and with the aid of the department's silo forms for cement silo construction.

Horticultural Demonstrations.—Under this appropriation the six-acre strawberry plot at Gordon Head—an important strawberry growing district near Victoria, Vancouver island—continued to be operated under rotation and as a means of determining the best methods of combatting the strawberry weevil, a menace to the industry which has assumed a serious aspect. The work is under the direction of the assistant horticulturist for the island.

Fruit Packing and Pruning Schools.—The horticultural instructors conducted pruning and packing schools at many points in the East and West Kootenay and the Okanagan districts, in response to a general demand for this form of instruction, particularly in regard to pruning. The classes were well attended. The packing schools were held chiefly in sections where fruit growing is not commercially organized and where the packing is done by the grower.

Poultry.—The province's International Egg-Laying Contest is the chief form of work receiving assistance. The ninth contest concluded in October, 1920. The birds entered were eligible to qualify for the Dominion Record of Performance.

Dairying.—Assistance was given chiefly to cow-testing through the five associations in operation in the province, a contribution being made to the tester's salary. Assistance is also given in districts where there are too few cows to support an association by supplying testing outfits, training an operator and paying a small bonus.

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Bee-keeping.—Five apiary inspectors were employed and many thousands of colonies were inspected in the Lower Fraser valley, where European foul-brood is prevalent. Outdoor demonstrations and lantern lectures were given by the inspectors wherever audiences could be secured.

Boys' and Girls' Clubs.—With the co-operation of the British Columbia Jersey Cattle Breeders' Association, the club projects were extended to include the rearing of pure-bred heifer calves. Twelve poultry clubs were formed and one club each for pigs, potatoes and corn.

Pathological and Entomological Work.—The grant provides under this head for an assistant entomologist at Vernon. The major subjects of the season's work were a continuation of last year's study of the life-history and control of the imported cotton maggot and the control of the cabbage root maggot. The local officer has charge of the preparation of insect and plant exhibits for fairs and exhibitions, acts as photographer, librarian and curator for the entomological collection at Vernon, and conducts the general work of the office, which is conveniently associated with that of the district horticulturist.

Publications.—Assistance was rendered to the publication of the *Agricultural Journal*, and in the distribution of bulletins, as in previous years.

Agricultural Education.—The total amount allotted to agricultural education by the province for the year was \$50,530. Of this sum, sixty per cent was provided from provincial funds and the balance (\$20,000) from Agricultural Instruction grant.

The policy of the Department of Education in regard to the teaching of elementary agriculture is summarized as follows:—

1. Special training for teachers in rural science by means of summer courses.
2. Special grants to teachers who successfully carry out an approved scheme of work, including school or home gardening.
3. Special grants to school boards in connection with rural science work.
4. Special grants to school boards and to teachers for organizing and maintaining supervised home gardens where school gardens are not practicable.
5. The inclusion of agriculture as an optional subject in high school, and the appointment of District Supervisors of Agricultural Instruction.
6. Extension classes in agriculture, said classes to be conducted by the district supervisor for young men of the district not in attendance at high school.
7. General supervision by the district supervisor of rural science work in the public schools of the district.

A service has been arranged between the Departments of Agriculture and Education whereby district supervisors are to act as agricultural representatives of the former department in advising farmers in regard to agricultural problems, which department on consideration of such services provides transportation facilities and office accommodation.

Teachers' summer courses were held in Victoria during July in rural science, manual training, and household economics. The total enrolment was 184. The University of British Columbia also offered summer courses for the first time, with an enrolment of 128 teachers. The Victoria Summer School was conducted, as formerly, by the Department of Education, and the transportation of teachers in attendance was paid. Six illustrated lectures on agricultural education and the rural school by Professor Kerr, of the University of California, were attended by the entire student body. The school was regarded as the most successful hitherto held.

A three-months' course in the theory and practice of agriculture, beginning early in January, was offered to ex-service men by the University of British Columbia. Seventy-eight returned men took the course, which was well received and highly successful.

SESSIONAL PAPER No. 15a

University of British Columbia.—A marked effort is being made to develop a strong policy of extension teaching in connection with the Faculty of Agriculture, and at the same time to develop within the departments various independent lines of extension investigation. The grant provides for the salary and expense of assistant professors in agronomy, animal husbandry, horticulture, poultry husbandry, and dairying, together with some special part-time assistance.

A number of projects were incepted during the year. In connection with poultry husbandry, a survey was begun of poultry farms and poultry industry generally. The object of the work was to study poultry farm conditions, cost of production, systems of housing, feeding, and such other problems as might present themselves. In regard to dairying, experiments were continued with the object of demonstrating the "period of usability" of milk produced for market purposes—for consumption and for butter and cheese manufacture. The data accumulated is being used as the basis of advice to those engaged and interested in the dairy industry. Under Horticulture, the work was continued of collecting data on varieties, distribution and value in the districts; yields of trees at various ages, cost of production, and methods of distribution and sale. The object in view is to make a complete economic survey of the fruit industry. In the Department of Agronomy, work was continued with a view to ascertaining which varieties of clovers and grasses are best adapted for various localities, soils, and purposes in British Columbia. Under Animal Husbandry, investigations into the cost of milk production are being conducted, also some investigational breeding work in Jersey cattle.

During the year, eight extension schools were conducted by the Faculty of Agriculture, and the average attendance was sixty. The schools are usually of four days' duration. In no case does the college offer work that has not been requested by the local organization. The college pays the expenses but the local committee is asked to assume the general responsibility for the success of the course.

VETERINARY COLLEGES

Under the Agricultural Instruction Act, the sum of \$20,000 is set aside annually for division between the recognized veterinary colleges. Two such institutions participate, the Ontario Veterinary College and the School of Veterinary Science, Montreal.

The grant is divided between these institutions on the basis of the number of students (British subjects) enrolled in the year previous. For 1919-20 the enrolment was as follows:—

Ontario Veterinary College.. . . .	69
School of Veterinary Science, Montreal.. . . .	23

Based on the number of students, the grant to the Ontario Veterinary College for 1920-21 was \$15,000, and to the School of Veterinary Science \$5,000.

Ontario Veterinary College.—Under date of August 10, 1920, the Minister of Agriculture for the province of Ontario reported that the grants hitherto made to that province on behalf of veterinary education had been wholly expended with the exception of a balance of \$11.18, thus disposing of all grants hitherto paid. The next succeeding unpaid grant then became available, namely, that of 1916-17, amounting to the sum of \$14,285.72. The agreement entered into was identical in terms with that of previous years, and on its completion, the grant of 1916-17 was paid to the province.

SESSIONAL PAPER No. 15a

FINANCIAL STATEMENTS

STATEMENTS, BY PROVINCES, OF THE EXPENDITURE OF THE
GRANT OF 1920-21

PROVINCE OF PRINCE EDWARD ISLAND

THE AGRICULTURAL INSTRUCTION ACT

Grant of 1920-21

SUMMARY STATEMENT, April 1, 1920, to March 31, 1921

Classification	Balances April 1	Grant	Refunds	Total Credits	Expendi- ture	Credit Balance
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Buildings account.....	492 78	1,507 00	1,525 00	3,524 78	3,220 77	304 01
Director and district repre- sentatives.....	1,365 01	3,235 00	.....	4,600 01	4,523 07	76 94
Short courses.....	254 34	246 00	.....	500 34	493 37	6 97
Drainage, soils and crops...	231 59	7,968 00	580 54	8,780 13	7,462 20	1,317 93
Live stock and dairying....	1,443 40	2,056 00	12 00	3,511 40	3,441 13	70 27
Poultry, bee-keeping, horti- culture and co-operative marketing.....	644 96	855 00	.....	1,499 96	853 11	646 85
Women's Institutes.....	873 90	2,566 00	75 00	3,514 90	3,513 84	1 06
Elementary agricultural Education.....	1,394 48	12,806 00	3,383 13	17,583 61	16,382 63	1,200 98
Miscellaneous and contin- gencies.....	1,961 07	510 22	.....	2,471 29	2,456 09	15 20
	8,661 53	31,743 22	5,575 67	45,986 42	42,316 21	3,640 21

PROVINCE OF NOVA SCOTIA

THE AGRICULTURAL INSTRUCTION ACT

Grant of 1920-21

SUMMARY STATEMENT, April 1, 1920, to March 31, 1921

Classification	Balances April 1	Grant	Re- funds	Total Credits	Expendi- ture	Debit Balance	Credit Balance
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
College, interest and sinking fund, Science building.....Dr.	68 46	8,000 00	.....	7,931 54	7,846 71	.....	84 83
College, salaries and mainten- ance.....	.....	24,000 00	.....	24,000 00	24,000 00	.....	.....
Agricultural representatives.....	222 38	7,850 00	.....	8,072 38	7,518 13	.....	554 25
Short courses.....	116 24	1,250 00	.....	1,366 24	1,025 26	.....	340 98
Dairying.....Dr.	859 72	7,500 00	*419 02	7,059 30	6,584 98	.....	474 32
Poultry.....Dr.	243 03	1,200 00	.....	956 97	656 92	.....	300 05
Bee-keeping and apiary work ..	.....	900 00	.....	900 00	888 35	.....	11 65
Drainage and soil survey....Dr.	714 83	1,800 00	.....	1,085 17	942 41	.....	142 76
Soils and fertilizers.....Dr.	690 29	1,500 00	.....	809 71	853 77	44 06	.....
Field crops.....	.....	700 00	.....	700 00	685 75	.....	14 25
Fruit growing.....Dr.	34 80	600 00	.....	565 20	522 54	.....	42 66
Women's work.....	317 54	5,000 00	.....	5,317 54	4,746 45	.....	571 09
Entomological work.....	325 35	9,000 00	.....	9,325 35	8,730 88	.....	594 47
Elementary agricultural educa- tion.....	1,925 96	12,000 00	.....	13,925 96	12,284 51	.....	1,641 45
Contingencies.....Dr.	6 69	416 69	.....	410 00	346 66	.....	63 34
	289 65	81,716 69	419 02	82,425 36	77,633 32	44 06	4,836 10

*Refund from New Brunswick and Prince Edward Island towards Dairy School Expenses.

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PROVINCE OF NEW BRUNSWICK

THE AGRICULTURAL INSTRUCTION ACT

Grant of 1920-21

SUMMARY STATEMENT, April 1, 1920, to March 31, 1921

No.	Classification	Balances April 1	Grant	Re- funds	Total Credits	Expendi- ture	Debit Balance	Credit Balance
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Agricultural schools— salaries, etc.....	681 74	400 00	.....	1,081 74	1,150 43	68 69	.....
2	Agricultural representa- tives.....	194 26	11,000 00	13 72	11,207 98	9,772 04	.....	1,435 94
3	Bee-keeping..... Dr.	188 21	2,700 00	200 00	2,711 79	3,141 59	429 80	.....
4	Soils and drainage..... Dr.	84 13	5,000 00	388 55	5,304 42	6,349 89	1,045 47	.....
5	Horticulture.....	431 17	5,000 00	.....	5,431 17	4,860 71	.....	570 46
6	Short courses..... Dr.	341 19	800 00	.....	458 81	684 10	225 29	.....
7	Live stock.....	314 47	3,000 00	37 40	3,351 87	3,231 54	.....	120 33
8	Dairying.....	81 86	5,400 00	1,016 22	6,498 08	5,637 19	.....	860 89
9	Poultry..... Dr.	1,696 91	4,500 00	793 04	3,596 13	2,897 01	.....	699 12
10	Entomology.....	506 05	110 00	.....	616 05	704 50	88 45	.....
11	Agricultural societies.. Dr.	159 34	3,000 00	.....	2,840 69	2,951 43	110 74	.....
12	Women's Institutes.... Dr.	2,168 38	9,300 00	11 60	7,143 22	7,440 94	297 72	.....
13	Elementary agricultural education.....	2,666 32	13,900 80	678 66	17,245 78	14,112 10	.....	3,133 68
14	Contingencies and mis- cellaneous.....	139 41	.....	.....	139 41	.....	.....	139 41
		377 12	64,110 80	3,139 19	67,627 14	62,933 47	2,266 16	6,959 83

PROVINCE OF QUEBEC

THE AGRICULTURAL INSTRUCTION ACT

Grant of 1919-20

SUMMARY STATEMENT, April 1, 1920, to June 30, 1920

Classification	Balances April 1	Expendi- ture
	\$ cts.	\$ cts.
Schools of agriculture.....	18,997 41	18,997 41
School of veterinary science.....	.....	.....
Animal husbandry.....	398 94	398 94
Poultry husbandry.....	2,230 89	2,230 89
Horticultural and entomological work.....	5,799 47	5,799 47
Experimental and demonstration orchards.....	1,456 23	1,456 23
Dairying.....	1,680 34	1,680 34
Agricultural representatives.....	15,330 91	15,330 91
Seed selection, clover plots and demonstration.....	532 77	532 77
Bee-keeping.....	1,006 88	1,006 88
Drainage.....	941 10	941 10
Maple industry.....	1,230 07	1,230 07
Short courses and lectures.....	62 38	62 38
Agriculture in academies.....	3 09	3 09
Domestic science.....	5,598 06	5,598 06
School children's exhibits.....	5 57	5 57
	55,274 11	55,274 11

SESSIONAL PAPER No. 15a

PROVINCE OF QUEBEC

THE AGRICULTURAL INSTRUCTION ACT

Grant of 1920-21

SUMMARY STATEMENT, April 1, 1920, to March 31, 1921

Classification	Grant	Expendi- ture	Credit Balance
	\$ cts.	\$ cts.	\$ cts.
Schools of agriculture.....	75,000 00	55,000 00	20,000 00
School of veterinary science.....	5,000 00	5,000 00	.....
Animal husbandry.....	9,000 00	9,000 00	.....
Poultry.....	18,000 00	8,353 91	9,646 09
Horticultural and entomological work.....	31,000 00	23,186 18	7,813 82
Experimental and demonstration orchards.....	4,000 00	755 59	3,244 41
Dairying.....	5,000 00	4,437 29	562 71
Agricultural representatives.....	69,000 00	63,316 63	5,683 37
Seed selection, clover plots and demonstration.....	9,000 00	8,650 42	349 58
Bee-keeping.....	7,000 00	7,000 00	.....
Drainage.....	6,000 00	5,296 31	703 69
Maple industry.....	4,000 00	2,914 49	1,085 51
Short courses and lectures.....	9,113 76	7,998 29	1,115 47
Agriculture in academies.....	8,000 00	7,879 06	120 94
Domestic science.....	10,000 00	9,872 61	127 39
School children's exhibits.....	2,000 00	2,000 00	.....
	271,113 76	220,660 78	50,482 98

MACDONALD COLLEGE

FINANCIAL STATEMENT for year ending March 31, 1921

April 1, 1921—Balance (Debit) forward.....	\$ 1,247 07
Receipts—	
Agricultural Instruction Act Grant.....	25,000 00
	\$ 23,752 93
Disbursements—	
Animal husbandry.....	\$ 2,914 85
Biology department.....	1,500 00
Cereal husbandry.....	2,096 60
Chemistry department.....	875 00
Horticulture department.....	145 52
Household science department.....	4,612 46
Poultry department.....	4,418 00
Veterinary science.....	2,419 83
Rural schools.....	4,742 35
Short courses.....	199 00
General.....	901 94
	24,825 55
Debit balance.....	\$ 1,072 62

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PROVINCE OF ONTARIO

THE AGRICULTURAL INSTRUCTION ACT

Grant of 1920-21

SUMMARY STATEMENT, April 1, 1920, to March 31, 1921

No.	Classification	Balance April 1	Grant	Refunds	Total Credits	Expendi- ture	Debit Balance	Credit Balance
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1a	O. A. C. capital expenditure.....	82,251 17	14,000 00	.....	96,251 17	95,511 32	.....	739 85
1b	O. A. C. salaries and expenses.....	919 34	15,000 00	.....	15,919 34	10,764 84	.....	5,154 50
2a	Kemptville Agricultural School—Capital.....	8,077 02	50,000 00	.....	58,077 02	66,618 21	8,541 19	.....
2b	Kemptville Agricultural School—Maintenance.....	Dr 1,099 23	20,000 00	10,107 23	34,408 66	33,920 29	.....	488 31
3	Agricultural representatives.....	2,213 12	135,000 00	5,400 60	137,513 82	128,860 39	.....	8,653 43
4	Household Science—Extension work.....	609 82	1,500 00	300 70	2,109 82	1,126 95	.....	982 87
5	Co-operation and markets.....	1,714 17	11,000 00	44 02	12,758 19	7,227 28	.....	5,530 91
6	Demonstrations in vegetable growing.....	7 39	12,000 00	432 43	12,425 04	12,370 51	.....	54 53
7	O. A. C. short courses (Acre-Profit Competition).....	Dr 1,320 23	2,500 00	57 73	3,877 96	2,381 85	.....	1,496 11
8	Women's Institute work.....	9 54	5,000 00	309 00	5,318 54	5,188 19	.....	130 35
9	Short courses for poultry judges.....	.....	1,000 00	.....	1,000 00	998 25	.....	1 75
10	Lectures on horticulture.....	546 97	500 00	.....	1,046 97	940 85	.....	106 12
11	Demonstration in growing and handling fruit.....	.....	1,803 26	.....	1,803 26	1,665 54	.....	137 72
12	Demonstration with vegetables, northern Ontario.....	1,046 87	5,000 00	884 77	6,931 64	6,058 67	.....	872 97
13	Horticultural Experiment Station.....	75 40	3,000 00	.....	3,075 40	1,290 63	.....	.....
14	Demonstration work on soils.....	647 34	6,000 00	500 00	7,147 34	7,140 62	.....	6 72
15	Demonstration in bee-keeping.....	667 11	1,000 00	.....	1,667 11	1,306 57	.....	360 54
16	Demonstration in corn growing.....	702 87	3,500 00	100 00	4,302 87	769 29	.....	3,533 58
17	Drainage work.....	24	4,500 00	.....	4,500 00	4,476 85	.....	23 39
18	Elementary agricultural education.....	8,310 44	44,000 00	2,420 49	54,730 93	50,397 52	.....	4,333 41
	1919-20 Stock and seed judging courses and Institute work.....	1,806 19	.....	.....	1,806 19	1,878 18	71 99	.....
	1918-19 Demonstrations in live stock and poultry.....	2,883 67	.....	.....	2,883 67	562 18	.....	2,321 49
	Central Algoma Agricultural Society.....	4,000 00	.....	.....	4,000 00	4,000 00	.....	.....
	Dairy demonstrations.....	15 81	.....	.....	15 81	.....	.....	15 81
	Live stock, in northern Ontario.....	3,427 84	.....	.....	3,427 84	3,427 84	.....	.....
	Milking Shorthorns.....	1,856 11	.....	.....	1,856 11	783 35	.....	.....
	Ontario Veterinary College (additional land).....	12,819 93	.....	.....	.....	1,072 76	.....	12,819 93
		134,814 58	336,303 26	20,556 97	491,674 81	452,523 70	8,613 18	47,764 29

SESSIONAL PAPER No. 15a

PROVINCE OF MANITOBA

THE AGRICULTURAL INSTRUCTION ACT

Grant of 1920-21

SUMMARY STATEMENT, April 1, 1920, to March 31, 1921

Classification	Balances April 1	Grant	Refunds	Total Credits	Expendi- ture	Credit Balance
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Agricultural representatives.....	68 41	13,000 00	1,150 00	14,218 41	13,615 43	602 98
Dairy work.....	2 15	6,000 00	*2,000 00	8,002 15	7,989 26	12 89
Poultry work.....	385 77	3,500 00	.....	3,885 77	3,768 36	117 41
Boys' and Girls' Club work.....	701 01	15,000 00	.....	15,701 01	15,519 38	181 63
Short course work.....	258 81	16,500 00	.....	16,758 81	16,619 60	139 21
Home economics.....	204 22	15,000 00	.....	15,204 22	15,150 05	54 17
Soil analysis and survey.....	2,007 05	1,000 00	*2,000 00	1,007 05	80 94	926 11
Bee-keeping.....	1,517 82	2,000 00	.....	3,517 82	3,261 74	256 08
Killarney Demonstration Farm.....	495 91	4,000 00	1,395 82	5,891 73	5,771 17	120 56
Contingencies and miscellaneous.....	762 47	1,113 11	.....	1,875 58	1,529 35	346 23
	6,403 62	77,113 11	2,545 82	86,062 55	83,305 28	2,757 27

*Transfer of \$2,000 from Soil Analysis and Survey to Dairy Work.

PROVINCE OF SASKATCHEWAN

THE AGRICULTURAL INSTRUCTION ACT

Grant of 1920-21

SUMMARY STATEMENT, April 1, 1920, to March 31, 1921

Classification	Balances April 1	Grant	Refunds	Total Credits	Expendi- ture	Debit Balance	Credit Balance
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Staff salaries, research, etc. }	21,476 16	.....	.....	.....	.....	.....	.....
Women's work..... }	7,524 50	5,500 00	.....	34,500 66	30,426 62	.....	4,074 04
Co-operative work..... Dr.	1,584 66	7,000 00	479 74	5,895 08	2,803 59	.....	3,091 49
Animal husbandry.....	4,505 26	3,000 00	.....	7,505 26	4,526 07	.....	2,979 19
Dairying.....	4,808 98	3,000 00	829 78	8,638 76	7,938 18	.....	700 58
Field husbandry and weed control.....	426 25	5,000 00	220 50	5,646 75	5,860 48	113 73	.....
Demonstration train.....	1,081 89	7,000 00	153 85	8,235 74	15,960 64	7,724 90	.....
Agricultural representatives..	10,905 66	1,476 16	750 25	13,132 07	5,791 44	.....	7,340 63
Veterinary short courses.....	714 60	500 00	.....	1,214 60	521 05	.....	693 55
Agricultural instructions in schools.....	15,530 13	24,476 16	171 49	40,177 78	33,825 50	.....	6,252 28
School fairs.....	6,432 12	2,500 00	.....	8,932 12	.....	.....	8,932 12
Agricultural scholarships.....	1,600 00	800 00	.....	2,400 00	800 00	.....	1,600 00
	51,944 73	81,728 48	2,605 61	136,278 82	108,453 57	7,838 63	35,663 88